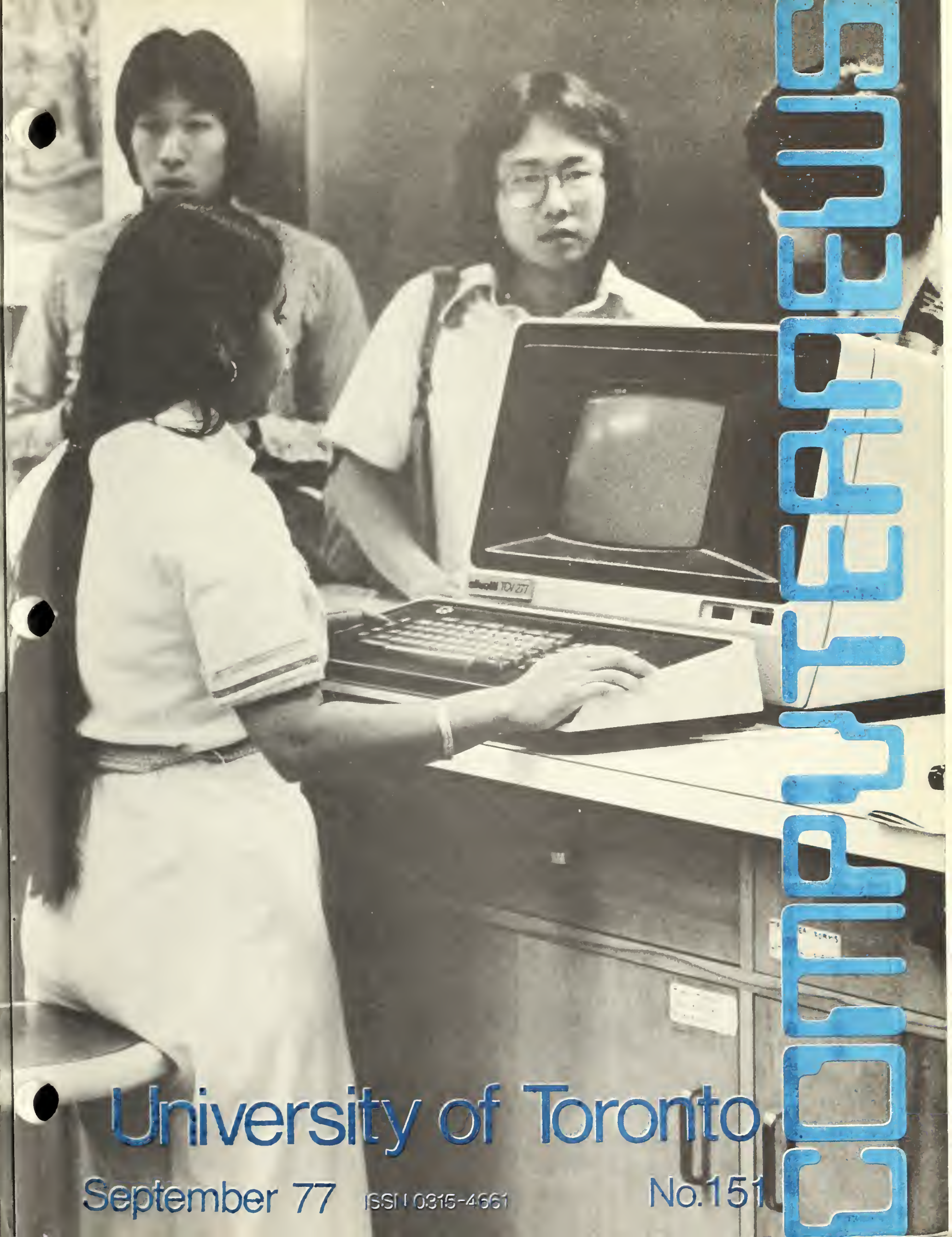




STUDENT

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Janet Campbell, Editor

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NEW DIRECTOR APPOINTED FOR UTCC

I am pleased to announce the appointment of Dr. Doron Cohen as Director of the University of Toronto Computer Centre.

Dr. Cohen is returning to the University of Toronto after an extended leave of absence. Dr. Cohen was one of the first students in the Department of Computer Science where he completed most of his doctoral course requirements in 1968. He completed his full Ph.D. requirements at the University of Waterloo and was awarded a Ph.D. in Computer Science in 1969.

Dr. Cohen brings with him a wide breadth of experience. He has held faculty appointments at the University of Waterloo and the TECHNION, the Israel Institute of Technology. He has been consultant to and has worked for numerous industrial and commercial companies in the development, management, and marketing of computer systems.

For the past five years Dr. Cohen has been the Director of the TECHNION Computer Centre in Haifa, Israel. Dr. Cohen has been responsible for the development of the TECHNION Computer Centre into one of the largest and most sophisticated computer installations in Israel. The computer services offered at the TECHNION are provided by a S/370-168 operating under the OS/VS2-HASP operating system. Many of the services, TSO, APL, and the IMS and TOTAL database systems, are the same as, or similar to services provided by UTCC.

The problems of developing and maintaining an organization responsive to user needs in a university environment are common to all university computer centres. Dr. Cohen is uniquely qualified to help us solve these problems.

Dr. Cohen will be assuming responsibilities as Director of the University of Toronto Computer Centre in January or February 1978.

I wish to welcome Dr. Cohen and extend him the full support of our staff and our users.

Rein Mikkor

COMPUTERIZED REGISTRATION

Editor's Note: The following article is based on a personal interview with Mr. Brian Leathem, Information Systems Manager and Ms. Dolly Kapoor, Chief Terminal Operator, Administrative staff of the Faculty of Applied Science and Engineering at the University of Toronto.

The photo on this month's issue of COMPUTERNEWS shows staff and students at the office of the Faculty of Applied Science and Engineering accessing the University of Toronto's student records database. Other Faculties and offices at the University of Toronto are using the computer database but not to the same degree as the Faculty of Engineering. Certain factors have contributed to the Engineering Faculty's current sophisticated and extensive use of the computer. With the inception of the University's records system in 1971, the Faculty of Engineering agreed to allow themselves to be an experimental group for the system.

cont'd...

COMPUTERIZED REGISTRATION cont'd

Several considerations were involved in that decision. First of all, the Engineering Administration was generally sympathetic to providing technological solutions to problems. In addition, the Engineering Faculty was the right size to provide a test case to pioneer the various processes. After some initial growing pains, the Engineering Faculty gradually converted more and more of its paper records to computer records and now uses the computer to process most of their student records material. Today, the computer is an important tool in the Faculty's preregistration program which was introduced in order to simplify and facilitate the complicated and sometimes frustrating student registration process.

Under this preregistration program, prior to the beginning of the Fall term, students receive via mail, the Faculty's calendar and preregistration material which includes instructions on course selection. The completed preregistration material is returned by mail to the University of Toronto. Once the course data etc. is verified, staff members enter it into the computer. The computer prints out the student's timetable which is passed to the Registrar's Office. The Registrar forwards it to the student who is now officially preregistered, without ever having to pay a personal visit to the campus. This preregistration process is especially helpful to students who are non-residents.

Eventually, however, the student has to stop by the Office to pick up his student card etc., but here the advantages of the preregistration system still hold. The timing of this visit is flexible, not the usual registration nightmare with 150 people lined up impatiently waiting to register. The computer system can also accomodate changes in a student's course of study or timetable. Once the proper approval has been received, the student need only present the necessary forms and a staff member will enter the information into the computer and a new timetable will be printed and presented to him within minutes.

The Faculty of Engineering has found that there are many advantages to computerized record handling. First of all, there has been a very significant reduction in errors in the records. Prior to the implementation of this system, a year-end review of the records would uncover errors in approximately 5% of the course records. With the implementation of this system, errors have become negligible, 3 or 4 errors or less than .2% of the records. This reduction in the error factor has freed up staff time for other things. The Faculty has gradually absorbed more and more of the record handling functions. They are now able to keep track of such things as course selections and changes, address changes, student marks, name changes, etc. with no increase in staff. Generally speaking the working conditions for the office staff are improved, because their relationship with the students is better. Students appreciate the high level of service they receive and, perhaps surprisingly, students argue less with the computer.

cont'd...

COMPUTERIZED REGISTRATION cont'd

There are some disadvantages to the system. When the computer is down, or the system is unavailable, no records can be processed. When the computer isn't there, your records aren't there and you can't function. Similarly problems may arise with the integrity or contents of the database. It may be necessary to do extensive reconstruction operations to restore the database. In cases like these, it is often difficult to estimate how long the office will be "off the air" and students may return only to find the system is still inoperable. Overall, however, the disadvantages appear to be outweighed by the advantages.

In summary, there are those who worry that the University Administrators are alienated from the students, from the real purpose of the University. The Faculty of Engineering has brought their Administrative staff as close to the students as possible. By using the computer, much of the paperwork is taken care of on a one-to-one basis, staff to student. The student no longer watches his form disappear into a stack with a thousand others. He gets an immediate response, personal service. It is hoped that now that the Engineering Faculty has shown it can be done, other faculties will make the conversion from paper records to computer records. Those joining the system in the future will certainly benefit from the knowledge and experience of the Engineering Faculty.

Janet Campbell

MVS STATUS REPORT

UTCC is continuing its development and testing of MVS. At the time of writing, we have had five user tests of MVS on Friday evenings from 6:30 to midnight. These tests have allowed UTCC to perform a production validation as the whole MVS system nears completion. During each test additional components were added and fixes to the IBM portion of the operating system were monitored and verified under a "real" load.

Software

A significant number of software packages have been converted to MVS:

- WYLBUR
- GOULD is now available on the 5200. Maximum plot length will be 163"; plots will be limited to about 400,000 vectors per job.
- Calcomp is available
- Backlog Displays for the Sandford Fleming Terminal and the Arts and Science Terminal have been completed.
- The High Speed Job Stream now supports all advertised processors.

In addition, many UTCC developed commands are available on MVS TSO.

Work on HASP to HASP and the REGISTER/SCRATCH/ALLOC System is progressing.

Accounting/Pricing

A large part of the remaining work is in the area of accounting and pricing. UTCC is currently working on:

cont'd...

MVS STATUS REPORT

cont'd

- establishing a pricing structure for MVS charges that is comparable to that under MVT
- adding accounting hooks into JES2, HSJS, TSO, WYLBUR and GOULD in order to record resource consumption
- adding a charging routine to JES2 to create charges for all resources consumed
- creating the required post-processing routines to interface with UTCC's accounts receivable system.

Reliability/Maintenance

The following serious problems were uncovered during the user tests and have subsequently been fixed:

- remote terminals would stop reading or printing after encountering a line error
- the system would crash after a channel control check
- the system would crash after an I/O error on the main console

During the last two weeks, 29 problems have been closed. Currently there are 29 outstanding problems of which 17 problems are medium to high priority.

Four IBM system enhancements are scheduled in the areas of:

- Scheduler/IOS (SU16)
- System Security (SU32)
- Dump Improvements (SU33)
- Hardware Error Recovery Enhancements (SU55)

Future User Tests

Watch HOTNEWS and signs announcing dates, times and services of the next MVS User test. We thank all those who have participated in our User Tests and invite the user community to free coffee, donuts and computing at our next MVS User Test.

Walter Berndt

UTCC JOINS TELENET

Data communications has rapidly expanded in the United States and is expanding world wide. Telenet Communications Corporation is a Washington-based packet switcher which last year began offering service to Canada through a link-up with the Trans-Canada Telephone System. Recently UTCC has become a Datapac/Telenet user, (Datapac is Canada's packet network).

Packet switching allows data transmission among heterogeneous computers and terminals. The Telenet network consists of leased lines which interconnect computers in Telenet's switching offices. These computers receive data over phone lines and break the data into packets, each packet having up to 128 characters. The packets are then routed through the network to the destination Telenet office where the message is reassembled for transmission to the user's computer or terminal.

cont'd...

UTCC JOINS TELENET

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Telenet has public dial-in ports throughout the United States. In Canada, public dial-in ports are provided in Montreal, Ottawa and Toronto. This means, for example, that if a UTCC user in Los Angeles requires data or information from our computer system, the user can access TSO through the Telenet network and retrieve the information for a very reasonable price.

A user using the Datapac/Telenet network incurs three charges. There is a public dial access charge which varies from \$1.80 per hour in a high density area to \$4.20 per hour in a low density area. The user is charged \$1.75 per 32-character kilopacket of data transmitted and is billed for the TSO session. Anyone interested in more information about the Datapac/Telenet network should contact Ralph Lombardi at 978-7130.

Ralph Lombardi

CLASS C SERVICE

Since June 1, 1977, CLASS C service has been provided at reduced rates for the summer period by charging half the normal memory rate for CLASS C. This reduced rate was advertised as being in effect from June 1, 1977 to September 30, 1977. Users are reminded that CLASS C memory charges will return to their normal rates as of October 1, 1977, i.e. the standard price of 1.30 per hundred kilobyte minutes of memory usage at a service factor of 0.75.

CLASS C jobs executed up to 6:00 a.m. on September 30, 1977 will be charged at the summer rate. Jobs in the queue after the 10:00 a.m. start-up on October 1, 1977 will not be deleted unless users specifically request cancellation. These jobs will be executed on subsequent available periods and will be charged at the normal rate quoted above. Users who wish to ensure that they obtain the cheaper rates should therefore submit their jobs well in advance to avoid any last minute rush and, if necessary, ask UTCC to cancel CLASS C jobs remaining in the queue on September 30 if they do not wish to pay the normal rates.

The CLASS C summer service was enhanced in that the hours of service for CLASS C execution were expanded to allow start-up of CLASS C before midnight when load permitted and to allow weekend execution of CLASS C jobs which were in the queue by Friday evening when load permitted.

These expanded hours of service will remain in effect over the October 1/2 weekend and succeeding days when possible but will be curtailed with the normal increase in load arising from the fall academic term. UTCC will continue to execute CLASS C jobs when load permits before midnight and on weekends. However, the probability of being able to execute CLASS C jobs during these periods will quickly diminish as the demands on the system increase this autumn.

Users who have any further questions on CLASS C service after October 1, 1977 should contact any Computing Co-ordinator. Complete documentation on CLASS C service can be found in the USERBOOK module 3.3BATCH.

Derry Cox

APL/SV PHASED OUT - SEPTEMBER, 1977

Following the announcement of our intent to remove the APL/SV service from production on the S/370-165-II, UTCC has made a concerted effort to contact all users of APL/SV services and to migrate their programs and applications to SHARP APL and alternative time-sharing facilities supported by UTCC.

We have been very fortunate in receiving a timely and helpful response from all APL/SV users.

The exact status of this project may be summarized as follows:

1. All active, or potentially active, APL/SV program source code has been moved to the SHARP APL system.
2. All active APL/SV systems and programs, subject to the instructions of the users affected, have been implemented on the SHARP APL system by UTCC and are now in production.
3. In a few cases, users are still evaluating their requirements and the future use of their APL/SV based systems. UTCC is maintaining these systems on SHARP APL and, on the advice of the users involved, will restore them on SHARP APL, or DEC APL-SF(DEC 1060), at some future time.
4. All other APL/SV accounts have been closed.

Thus, to the best of our knowledge, as a result of the work of the past few months and the development of new facilities on the SHARP APL system, we believe that no user will be adversely affected by the removal of the APL/SV service at this time.

Final Production Date

The final production date for APL/SV at UTCC is Friday, September 30, 1977.

In a separate article in this Newsletter, we have presented a brief review of the history of APL/SV at the University of Toronto Computer Centre.

Ernst Goetze

BINDING FOR COMPUTER OUTPUT

Recently some interest has been expressed for having a binding service for printed output. To date we have seen two alternatives to the traditional do-it-yourself type binders. The first is a mechanical binding which has two plastic strips holding the contents between two plastic covers. The second binding uses a heat - glue process to bind the contents along one edge as well as to a cardboard cover. A major disadvantage of the first binding is that it necessitates bursting all sheets to be bound; the second type does not require bursting.

cont'd...

BINDING FOR OUTPUT

cont'd

The two samples are available for inspection in the Information Office, Engineering Annex Room 206. If enough demand exists, UTCC will further investigate providing this service. If you want this service let us know by visiting the Information Office or writing to the COMPUTERNEWS Editor.

Don GibsonINFORMATION OFFICE EXTENDED HOURS

Commencing the week of September 19th, until further notice, the Information Office hours will be extended to two evenings a week and Saturday. This area will therefore be open.

Monday	9 AM to 5 PM
Tuesday	9 AM to 5 PM
Wednesday	9 AM to 9 PM
Thursday	9 AM to 9 PM
Friday	9 AM to 5 PM
Saturday	10 AM to 6 PM
Sunday	CLOSED

Marg DohertyDOCUMATION 6501 CARD READERS

The users of the Sandford Fleming terminal have had an opportunity to try the Documation 6501 card reader over the last few months. As might be expected, some people like the reader while others do not.

The major complaint about this reader is that it is more difficult to read in large numbers of cards due to the hopper and stacker mechanisms as well as a shortage of counter space. Another problem is that cards which have verification punches on the left edge will not read. This problem is limited to only a few users however.

Other users report that the card reader has given them fewer difficulties; for instance, the occurrence of card jams seems to be lower. Another feature is that the 6501 seems to accept damaged or warped cards more readily than the IBM 2501 does.

The 6501, while not perfect, does meet the requirements of the New Sandford Fleming Terminal (See July, 1977 COMPUTERNEWS) and is considerably cheaper than other similar machines. Therefore, we have selected it as the best card reader for the job.

For users who are concerned about reading in multi-box jobs, there will be a 2540 reader available as well. The OMR 2501 card reader will still be available but will remain in the Sandford Fleming Building.

Don Gibson

NEW SORT PROCEDURE AVAILABLE

UTCC has noted a considerable increase in the number of sorts involving a great deal of data. This can lead to problems in sort work space, since on disk, this space must be contiguous. Often, on the online scratch pack, this space is not available; worse yet, if the user does not allocate enough space, the sort will not fail, but instead may 'throw away' some of the user's data without issuing a warning message of any kind.

Some users may be aware of the SORTMNT1 and SORTMNT2 procedures which dedicate 1 and 2 2314 disk packs respectively to sort work space. There is now a third major procedure, SORTTAPE which allows for more work space than either of the above and is, in addition, more flexible in that the SORTIN/SORTOUT logical record length, LRECL, can be greater than 7294 or 13030 bytes, the maximum track capacity respectively for a 2314 and a 3330 disk drive. This is very important for variable length records whose logical record length is quite often much greater than either of the above values. The new procedure uses three 3400-5 tape units for sort work storage.

This new procedure is currently being documented for USERBOOK, but, in the meantime, the procedure itself, located in SYS2.PROCLIB is completely documented and can be listed and then used.

If a user has any questions regarding sorts or this procedure, please phone Herb Kugel, 978-7286.

Herb Kugel

P.S. ... P.S. ... P.S. ...
GONE FICHEING

The implementation of the new Alumni Affairs System brought with it several significant changes for the Alumni Records staff. One of the biggest of these was the introduction of micro-fiche as a hard copy reference of the entire Alumni Master File.

Prior to implementation, the hard copy Master File reference consisted of cards containing only basic information which were produced and stored alphabetically in filing cabinets. Update cards were produced when changes were made to this basic information.

A requirement of the new system was that the hard copy Master File should contain all stored information for each Alumnus; also, the Master File would contain almost 100,000 more Alumni than with the old system. To print all this information on paper would have meant over 3 million lines of print, 20 boxes of standard stock, hours of print time and more than a few angry I/O operators.

Programming Services and Alumni Affairs discussed the problem and decided to go to micro-fiche. The micro-fiche file consists of approximately 200 fiche containing the Master File and 10 index fiche. The entire file is stored in one binder as opposed to several filing cabinets and any record can be retrieved easily using a micro-fiche reader.

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P.S. ... GONE FICHEING cont'd

Once a month, a micro-fiche file containing updated Master File records is created, along with a new index and, when required, the Master File is used to create an entirely new fiche file and index.

So fishing in the card file has been replaced by ficheing into micro-fiche. Of course, three people can't go ficheing together, but ...

Bob Blackburn

TRUE STORIES (I)

The following may be useful in an optimal programming effort:

- a) Don't shuffle your cards while eating peanut butter and grape jelly sandwiches. It creates a sticky mess which clogs the card reader. Besides, it also brings ants.
- b) Try and trust tape and disk. Don't carry 20,000 cards around in a supermarket shopping cart. The rain and snow will do them no good. Really, we've made progress disk and tape are as reliable as a Dominion Food Market cart -- besides, the store might want its cart back.

Herb Kugel

BIORHYTHMS PROGRAM AVAILABLE

Biorhythms may be briefly described as that branch of science which deals with periodic and repetative changes in the physical, intellectual and/or emotional levels of living creatures. There are many services, some quite expensive, which will calculate a human being's biorhythms. UTCC has obtained through the generosity of the program's writer, a GPJS program that will printer plot the biorhythms of a person for an entire year through the use of merely one data statement.

So, if you want to find out a bit more about biorhythms and learn how to obtain your own, simply code:

```
// EXEC WHATBIO
```

Herb Kugel

SAS 76.5

The 76.5 version of SAS (Statistical Analysis System) was recently installed and is now the production version. Access to SAS remains exactly as before, using the batch catalogued procedures SAS, SASBMDP, and SASBOTH, and the TSO command SAS. This is mainly a maintenance release, so most changes should be transparent to the user. It is the first PL/I Optimizer version, which should run faster than the older PL/I(F) version. As the first such version, however, there may be some unforeseen problems, some of which have already surfaced. Users encountering any problems are asked to bring them to the attention of John Roth, the UTCC SAS Co-ordinator.

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SAS 76.5

cont'd

Changes and enhancements to SAS are documented in the SAS Supplemental Library User's Guide, which is on order and should be available soon in the Information Office, Engineering Annex. Briefly:

- SAS system datasets on tape
- new formats: \$, Roman, words
- extensive time and date facilities
- new options, including weighting for GLM and ANOVA
- output datasets from FREQ
- PROC MATRIX enhancements: DO I = n TO m BY k, DO WHILE, operators, others
- PROC FORMATS; for value labels
- PROC FORMS; for mailing labels
- PROC PCTL; computes percentiles
- PROC PLOT replaces PROC SCATTER

John RothSAS 72 To Be Removed

With SAS version 76.5 up on our system, it is hoped that very shortly we will be able to delete both 76.4 and SAS 72. Virtually all functions and facilities are implemented in SAS 76.5 and UTCC would like to remove the older versions. Any user who feels that SAS 72 should not be removed, should call John Roth at 978-6878. In addition, all known users of SAS 72 will be notified by mail.

John RothSPSS 7.1

SPSS was recently upgraded to the 7.1 level. This was strictly a maintenance release to fix some bugs in 7.0. The Release 7.0 Update Manual contains the necessary documentation for 7.1 and is now available in the Information Office for \$2.50. Any user encountering problems with this new release should contact John Roth at 978-6878.

John RothWYLBUR WORDS

The USERBOOK module 3.3WYLBUR has been updated and will soon be mailed to USERBOOK subscribers. Major changes include the addition of log on and terminal information and the addition of several examples and sample sessions.

WYLBUR users with TSO-style datasets should be aware of a potential problem area. The problem derives from WYLBUR's internal line length limit of 133 characters. When using a VB dataset, lines longer than 133 characters are truncated, with no warning that this has been done. You should do a

show size over 131

to find any lines of length 132 or 133 - these may indicate truncations. Similarly, when SAVEing if you specify CARD format or an LRECL value, records may be truncated in the written file (the active file is not affected).

cont'd...

WYLBUR WORDS

cont'd

Users are therefore cautioned to use the SHOW SIZE command before saving into a CARD dataset.

Users with WYLBUR problems or questions should contact Ian Darwin at 978-7318.

Ian Darwin

SCRIPT SESSIONS

SYSPUB, a superset of SCRIPT commands is easy to use and is useful in preparing documents to a standard format. A recent USERBOOK module was successfully prepared using SYSPUB. For more information on SYSPUB, run the following job:

```
// EXEC SYSPUB,FORMS=2018
```

Users should also note that the SCRIPT Reference Manual, obtained via the SCRIPTMN procedure is being updated to reflect improvements in SCRIPT. Enhancements include the facility for underscoring part of an input line by use of a 'trigger' character, prefix or suffix characters on page numbers, multi-column formatting and a number of other features.

Users with problems, suggestions, etc. should contact Ian Darwin at 978-7318.

Ian Darwin

ATTENTION QED USERS

The QED Reference Manual is being updated to reflect the changes outlined in the May 77 COMPUTERNEWS. The updated manual is still accessed via the QEDMN procedure.

Ian Darwin

PERSONNEL CHANGES

Leaving the Centre this month is Mary Alkenbrack. Mary has left to get married and has moved to Bracebridge, Ontario. Best wishes for your future.

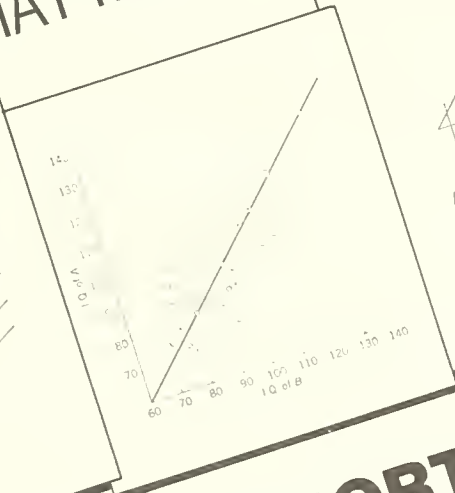
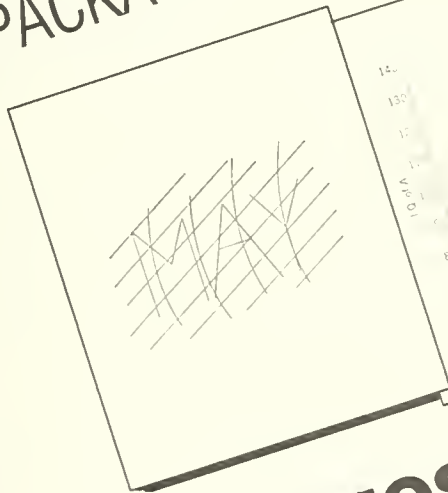
Joining the Centre this month are Glenn Thompson and Dawne Smith. Glenn is a Computer Operator at the S/360-65 and Dawne has replaced Mary Alkenbrack as a documentation clerk in the Information Office. Welcome aboard.

To clarify an item appearing in the August PERSONNEL CHANGES article, I would like to mention that Jimmy Chu is with us on a part-time basis in the Administration Office.

Clara Silva

ARE YOU
BOGGED DOWN
WITH STATISTICS?
WE CAN SIMPLIFY
THE PROCESS FOR YOU.

UTCC HAS MANY OF THE COMMONLY AVAILABLE
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$$z_{\alpha/2} = \frac{\lambda - Y}{\sigma_{\lambda/2}}$$

where $\sigma_{\lambda/2}$ is computed from the formula

$$\sigma_{\lambda/2} = \sqrt{(\sigma_1)^2 + (\sigma_2)^2}$$

**AND MOST IMPORTANT,
WE HAVE THE PEOPLE WHO CAN
HELP YOU GET STARTED.**

FOR FURTHER INFORMATION,
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SERVICE GROUP AT 978-6021



RECENT ACQUISITIONS IN THE
DEPARTMENT OF COMPUTER
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APL/SV (1975 - 1977) - A Brief Review

As avid APL/SV users, we will feel a sense of loss when APL/SV goes down for the last time.

Therefore, we would like to acknowledge the contribution that the APL/SV processor has made to the further development of APL computing at the U of T, and, to comment on the APL computing services that are available now and in the near future.

August, 1975

In 1975, IBM APL/SV was the most advanced APL processor of the time.

- IBM APL/SV introduced system variables for determining and controlling the workspace environment.

- and, system functions, for manipulating workspace objects, such as functions, labels and namelists, as data.

Both of these concepts were formalized as `[-`names, as, for example, `[IO`, `[RL`, `[PW`, `[PP`, etc., and, `[LX`, `[LC`, `[CR`, `[FX`, and so forth.

- IBM APL/SV introduced shared variable processors in order to provide a user accessible interface between the APL processor and host system resources.

UTCC implemented the APL/SV processor, with the TSIO (Time Shared Input Output) auxiliary processor for access to disk datasets, and a remote job entry subsystem that facilitated access to all batch programming resources of the S/370-165-II from APL/SV.

In addition, UTCC included the local enhancements, such as ARBOUT, QUIETLOAD, CLEAROUT, etc., that users have grown to expect from experience with the UTCC SHARP APL system.

At that time, APL/SV represented a significant advance in APL computing, though we also realized that the processor was weak in

- the efficiency of implementation of certain APL primitive functions

- the efficiency of execution of supervisor service requests (TSIO, essentially)

and

- the processor was established in a computing environment, the S/370-165-II, that was more favorable to batch access, than time-sharing access.

May, 1976

Other vendors and developers of APL processors followed the example of APL/SV.

cont'd...

I.P.Sharp Associates developed a new APL processor that included execution efficiencies,]-names, and a re-named set of keyword primitive functions (FF, FMT, FD, WS, FI, VI).

Moreover, it would be fair to say that other vendors had indeed learned from the example of APL/SV and I.P.Sharp's APL, and Incorporated many of these features in their own APL processors, in one form or another.

As we pointed out in last month's Newsletter, all modern APL processors implement

- APL/360 plus APL/SV system functions and system variables
- Backing Storage System(external, file storage) and
- other features that, generally, serve to complement the basic concepts of APL, as well as to provide a better user interface to the host system resources.

September, 1976

DEC APL-SF (DEC APL, with System Functions) advanced to the current standard.

APL-SF also incorporated significant enhancements, such as a variable workspace size, dynamic execution of all system commands, monitor - level access to the host system and, essential file compatibility with other processors running on the same machine.

September, 1977

UTCC removes the APL/SV processor from service.

Thus, APL/SV has helped to span a generation in APL computing during the past two years.

In the future, UTCC will support two APL implementations, DEC APL-SF on our recently purchased DEC 1060 computer, and, SHARP APL on the IBM S/360-65.

Both will be fully supported APL systems, with a large library of APL programs developed here and elsewhere, a library CATALOG, and a HOTNEWS facility.

In addition, UTCC will be very supportive of workspace and application transfers from SHARP APL to the new system, though we do not expect that APL-SF will displace SHARP APL as the primary APL processor at the U of T for some time to come.

Ernst Goetze

UTCC SYSTEMSSYSTEM/370 MODEL 165-II

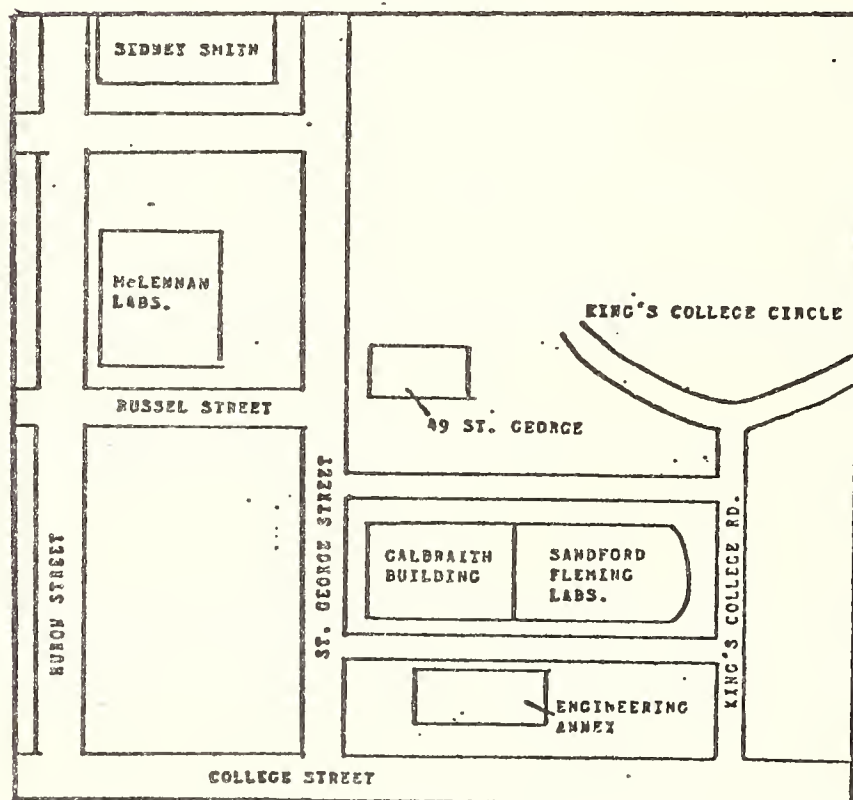
- located in SF103/105/112
- provides General Purpose Job Stream, High Speed Job Stream, APL SV, TSO, WYLBUR
- 4 megabytes of memory
- OS/MVT with HASP

SYSTEM/360 MODEL 65

- located in McLennan Physical Laboratories
- provides APL and ATS services
- 1536K bytes of core
- OS/MVT with APL and ATS

COMPUTER RESEARCH FACILITY

- located in SF207
- DEC GT44 System with PDP-11/40 CPU
- DEC GT40 System with PDP-11/05CPU
- provides specialized graphics and interactive graphics
- provides on-line and real-time computing services, data acquisition and minicomputer services



UTCC DIRECTORYACTING DIRECTOR

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SUPERVISOR, PROGRAMMING SERVICES

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Program Advisors	EA207	8599

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Jill Reece	SS2104	6509

New Physics		
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Dave Wong (S/370-155)		6864

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Krishna Patnaik	SF207	4086
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Merton Hunte	EA206	8702

ACCESS CODES

Gail Cavers	EA206	8703
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MANAGER, INFORMATION SYSTEMS

Sean Keeley		3579
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NOTE:

EA = Engineering Annex
 SF = Sandford Fleming
 SG = 49 St. George
 NP = McLennan Physical (New Physics)
 SS = Sydney Smith

JOB AND SYSTEM STATUS QUERIES

SYSTEM/370,TSO	7373
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ATS/APL	6234
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2741 TERMINAL MALFUNCTIONS	7107
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029 KEYPUNCH MALFUNCTIONS	6465
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SERVICES

	<u>DIAL-UP</u>	<u>ADVICE</u>
APL - 2741	7200	6710
APL(ASCII)	7200	6710
APL SV - 2741	7239	6710
APL SV - TTY	7447	6710
ATS	7100	7107
TSO - 2741	7303	8599
TSO - TTY (10 cps)	7390	8599
TSO - TTY (30 cps)	7386	8599
DATATALK	6710	6710
WYLBUR	7235(EBCDIC)	8599
	3950(ASCII)	
	CENTREX	
	3954(ASCII)	
	NON CENTREX	

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